

BAB III

PENUTUP

A. Kesimpulan

Melalui hasil pengolahan data yang telah dijabarkan di atas, penulis berkesimpulan bahwa sebenarnya tujuan dari Konvensi Perubahan Iklim dan Protokol Kyoto yang mana adalah untuk menstabilkan konsentrasi gas rumah kaca di atmosfir dalam level yang dapat tidak membahayakan sistem iklim dunia telah mulai dilaksanakan sesuai dengan apa yang diamanatkan dalam ketentuan kedua perjanjian tersebut. Namun belumlah terlihat perubahan yang signifikan dari proses pengurangan tersebut bahkan di tahun 2007 dan 2008 yang mana tahun 2008 adalah mulai berlakunya komitmen pertama dari Protokol Kyoto angka emisi yang dikeluarkan oleh Negara Annex I malah meningkat dibandingkan dari tahun-tahun sebelumnya.

Meskipun demikian dapat terlihat melalui proyek-proyek CDM yang telah dilakukan di Negara-negara berkembang telah menghasilkan CER yang lumayan besar, yang artinya telah terjadi penurunan emisi dalam bidang tersebut di negara berkembang.

Namun walaupun telah mulai dilakukannya proses pengurangan emisi oleh Negara-negara maju masih terdapat beberapa kecurangan-kecurangan dalam melaksanakan ketentuan penurunan emisi. Banyak Negara-negara maju yang tergabung dalam Negara Annex I dalam

melakukan penurunan emisinya mengandalkan mekanisme CDM di Negara berkembang karena dengan melakukan hal tersebut mereka tidak melakukan penurunan emisi dinegaranya sendiri atau tidak melakukan tindakan penurunan emisi domestik, yang semestinya tetap mereka lakukan, karena bila hal tersebut dilakukan dapat mengakibatkan penurunan produksi dalam negaranya, yang berakibat pada perekonomian negara. Lagipula untuk melakukan kerjasama dalam mekanisme CDM biaya yang perlu dikeluarkan oleh mereka sangatlah kecil bila dibandingkan dengan melakukan penurunan emisi di negaranya sendiri. Hal tersebut memang lebih efektif bagi kepentingan negara-negara tersebut tetapi menjadi tidak efektif bila kita berbicara mengenai tujuan awal dari dibentuknya Konvensi Perubahan Iklim dan Protokol Kyoto.

B. Saran

Menurut penulis implementasi CDM yang dilakukan oleh Negara berkembang khususnya Indonesia walau pada prinsipnya mekanisme dalam Protokol Kyoto telah baik namun dalam pelaksanaannya mekanisme dalam Protokol Kyoto belumlah tepat mengenai sasaran sebenarnya karena dalam melaksanakannya banyak pihak yang hanya mengimplementasikan CDM untuk mendapatkan kredit karbon dan tidak secara langsung mengurangi emisi buangan di negaranya masing-masing.

Hal tersebut menurut penulis karena tidak adanya batas berapa besar mereka dapat membeli kredit karbon sebagai hasil dari transefer teknologi dalam melakukan mekanisme pembangunan bersih di Negara-negara non

Annex I, yang menyebabkan dalam menurunkan emisinya mereka hanya mengandalkan penurunan emisi melalui proyek-proyek CDM yang dilakukan di Negara-negara Non Annex I, yang mana biayanya jauh lebih murah daripada melakukan di Negara mereka masing-masing.

Dengan diberlakukannya batasan jumlah CER yang dapat dibeli oleh para Negara maju yang menyuplai dana untuk pembangunan bersih di Negara berkembang maka menurut penulis tujuan dari dibentuknya Protokol Kyoto akan dapat terlaksana lebih cepat dan baik. Karena Negara-negara Annex I mau tidak mau harus melakukan tidak penurunan emisi domestik di negaranya masing-masing.

CDM PROJECT IMPLEMENTATION IN SUMUR BATU LANDFILL BEKASI CITY

Project Credit Years	Methane Generated (m³ x 10⁶ / year)	Methane gas Flared (m³ x 10⁶ / year)	Methane gas Flared (m³ / day)	Methane gas Flared (m³ / hour)	Methane Gas Flared per hour (tonne)	Emission Reductions (tonne CO₂e / year)
2006	1.73	0.13	365	15	0.010	2,003
2007	2.79	2.15	5,879	245	0.167	32,301
2008	3.76	2.89	7,930	330	0.225	43,568
2009	4.97	3.83	10,484	437	0.297	57,604
2010	6.09	4.68	12,835	535	0.364	70,517
2011	7.12	5.48	15,002	625	0.426	82,424
2012	8.40	6.46	17,704	738	0.502	97,269
2013	9.58	7.37	20,199	842	0.573	110,981
2014	10.68	8.22	22,510	938	0.639	123,677
2015	11.69	9.00	24,656	1,027	0.700	135,465
2016	12.64	9.73	26,653	1,111	0.756	146,439
					Total	902,246



Current Status of CDM in India

Basic Information (as of 1 August 2009)

Project Status	Number of projects	1 Feb – 30 Apr '09	1 May- 31 Jul '09
CDM projects registered at CDM executive board	448	28	28
CDM projects at or after the validation stage	1,311	72	99
CDM projects approved by India	1,369 *	-	-

* This value is based on the information available on 1 August 2009 at CDM India website. The frequency and timing of update is not publicized.

Basic data on CDM Projects (as of 1 August 2009)

	Registered CDM Projects				Review Conducted	Rejected
	N. of Projects	Average Annual Emission Reduction (tCO ₂)	Total ERs by 2012 (tCO ₂)	Amount of Issued CERs (tCO ₂)		
Biomass	136	35,235	33,566,449	5,420,033	13	15
Wind power	85	42,270	24,669,471	6,129,403	13	6
Waste gas / heat utilization	64	89,083	35,191,903	8,526,111	16	3
Hydro power	54	75,010	15,837,490	1,528,661	8	4
Energy efficiency	50	23,445	8,321,110	909,326	3	5
Cement	17	116,077	16,806,437	1,253,152	2	4
Fuel Switch	11	378,953	21,138,002	1,214,545	1	0
Biogas	11	18,990	2,282,160	457,827	0	0
Methane avoidance	10	69,690	2,177,668	0	0	0
HFC reduction	5	2,123,438	82,578,575	43,457,153	2	0
Afforestation & reforestation	2	34,694	674,247	0	0	0
Methane recovery & utilization	1	64,599	569,990	75,896	0	0
Transportation	1	41,160	236,811	3,269	0	0
Other renewable energies	1	562	3,936	0	0	0
Total	448	83,207 **	244,104,791	68,975,376	58	37

Source: IGES CDM Project Database <<http://www.iges.or.jp/en/cdm/report.html#db>> , UNFCCC <<http://cdm.unfccc.int/index.html>>

** This value is not the total of average annual emission reduction of each project type, but average annual emission reduction of all the projects.

CDM Country Fact Sheet : Indonesia



Current Status of CDM in Indonesia

Basic Information (as of 1 May 2009)

IGES Market Mechanism Project / Climate Change Area
Kentaro Takahashi May 2009

Project Status	The Number of Projects	New since Feb 1 2009
CDM projects registered at CDM executive board	24	2
CDM projects approved by the Indonesia DNA	90	20
CDM projects at or after the validation stage	127	5

Source: IGES CDM Project Database <http://www.iges.or.jp/en/cdm/report_cdm.html> ,
National Commission for Clean Development Mechanism <http://dna-cdm.menlh.go.id/en/>, UNFCCC <<http://cdm.unfccc.int/index.html>>

Basic Data on Registered CDM Projects (as of 1 May 2009)

	N. of Projects	Registered CDM Projects			Review Conducted	Rejected
		Average Annual Emission Reduction (tCO ₂)	Total ERs by 2012 (tCO ₂)	Amount of Issued CERs (tCO ₂)		
Biomass	7	113,001	3,667,824	0	0	0
Biogas	5	105,774	2,887,534	0	1	1
Methane recovery & utilization	2	86,261	815,193	0	0	0
Other renewable energies	2	327,837	3,991,885	1,077	0	0
Cement	2	307,082	4,604,578	80,967	0	0
Energy efficiency	2	26,731	198,581	0	0	0
Methane avoidance	1	7,671	25,791	0	0	0
Waste gas heat utilization	1	390,893	2,429,689	113,446	0	0
Fuel switch	1	42,622	163,967	17,154	0	0
N ₂ O Reduction	1	80,668	300,350	0	0	0
Total	24	148,854*	19,085,392	212,644	1	1

Source: IGES CDM Project Database <http://www.iges.or.jp/en/cdm/report_cdm.html> and UNFCCC <<http://cdm.unfccc.int/index.html>>

* This value is not the total of average annual emission reduction of each project type, but average annual emission reduction of all the ten project types



CDM Country Fact Sheet : The Philippines

IGES Market Mechanism Project / Climate Change Area
Kazuhisa KOAKUTSU, Chisako URAYAMA May 2009

Current Status of CDM in The Philippines

Basic Information (as of 1 May 2009)

Project Status	Number of Projects	New since Feb/Mar 2009
CDM projects registered at CDM executive board ^[1]	27	4
CDM projects approved by the Philippines DNA ^[2]	60	1
CDM projects at or after the validation stage ^[3]	51	6

Source

[1] IGES CDM Project Database
http://www.iges.or.jp/en/cdm/report_cdm.html

[2] The Philippine CDM DNA Secretariat

[3] UNFCCC Validation
<http://cdm.unfccc.int/Projects/Validation/index.html>,

Basic Data on Registered CDM Projects (as of 1 May 2009)

		Registered CDM Projects				Review Conducted	Rejected
		N. of Projects	Ave. Annual ERs (tCO ₂ /y)	Total ERs by 2012 (tCO ₂)	Issued CERs		
Biogas (Animal waste)		15	4,375	342,418	0	3	1
Biogas (Waste water treatment)		2	62,313	657,336	0	0	0
Biomass Utilisation		3	58,658	773,320	0	0	0
Methane avoidance (Composting)		1	6,058	24,467	0	0	0
Methane recovery & utilization (Landfill gas recovery & utilization)		2	353,166	2,735,022	0	0	0
Geothermal power		1	74,975	374,875	0	0	0
Waste gas/heat utilization		1	61,702	308,510	0	0	0
Wind power		1	56,788	454,304	64,568	0	0
Hydro power		1	95,174	327,697	0	0	0
Total		27	85,912*	5,997,950	64,568	3	1

Source: IGES CDM Project Database updated on May 1 2009, IGES Review and Rejected CDM Project Database , http://www.iges.or.jp/en/cdm/report_cdm.html

* This value is not the total of average annual emission reduction of each project type, but average annual emission reduction of all the eleven project types.

CDM Country Fact Sheet : Thailand



Current Status of CDM in Thailand

Basic Information (as of 1 August 2009)

Project Status	The Number of Projects	1 Feb – Apr 30 2009	1 May – 31 Jul 2009
CDM projects registered at CDM executive board	18	6	1
CDM projects approved by the Thai DNA	86	9	20
CDM projects at or after the validation stage	102	16	9

Source: IGES CDM Project Database <<http://www.iges.or.jp/jp/cdm/report.html#db>>, UNFCCC <<http://cdm.unfccc.int/index.html>>, Thailand Greenhouse Gas Management Organization (TGO) <<http://www.tgo.or.th/english/>> . Last updated on 13 July 2009. TGO Carbon Monthly July 2009, Issue 7.

Basic Data on CDM Projects (as of 1 August 2009)

	Registered CDM Projects					Rejected
	N. of projects	Average Annual Emission Reduction (tCO ₂)	Total ERs by 2012 (tCO ₂)	Amount of issued CERs	Review Conducted	
Biogas (Wastewater Treatment)	8	91,783	5,490,074	714,546		
Biomass (Bagasse)	3	85,690	1,965,827		3	
Biogas (Animal Waste)	3	23,869	346,809			
N ₂ O reduction	1	142,402	594,657		1	
Biomass (EFB)	1	106,592	422,929			
Biomass (Rice Husk)	1	70,772	495,404	100,678		1
Methane recovery & utilization	1	47,185	290,872		1	
Total	18	79,438 *	9,606,572	815,224	5	1

Source: IGES CDM Project database <<http://www.iges.or.jp/jp/cdm/report.html#db>>

** This value is not the total of average annual emission reduction of each project type, but average annual emission reduction of all the seven project types.

Country List

	country	installation count	allocated allowances 2005	verified emissions 2005	emissions-to-cap (=E-C) 2005	emissions-to-cap ratio (as % of cap) 2005
1	Austria	220	32,412,654	33,372,841	-962,887	+2.97 %
2	Belgium	351	58,309,908	55,363,232	-2,946,676	-5.05 %
3	Bulgaria	128				
4	Cyprus	13	5,471,353	5,078,877	-392,476	-7.17 %
5	Czech Republic	417	96,919,971	82,454,636	-14,453,013	-14.91 %
6	Denmark	400	37,303,720	26,475,718	-10,828,002	-29.03 %
7	Estonia	52	16,698,374	12,575,135	-4,118,650	-24.67 %
8	Finland	641	44,665,566	33,099,660	-11,565,906	-25.89 %
9	France	1108	150,412,090	131,263,794	-19,148,296	-12.73 %
10	Germany	1944	493,482,295	474,974,772	-18,481,764	-3.75 %
11	Greece	156	71,162,432	71,267,752	149,432	+0.21 %
12	Hungary	259	30,236,166	26,161,642	-4,074,524	-13.48 %
13	Ireland	121	19,236,747	22,441,006	3,204,259	+16.66 %
14	Italy	1083	216,150,241	225,989,455	9,930,413	+4.60 %
15	Latvia	110	4,070,078	2,854,492	-1,215,586	-29.87 %
16	Lithuania	113	13,499,398	6,603,869	-6,895,529	-51.08 %
17	Luxembourg	15	3,229,321	2,603,349	-625,972	-19.38 %
18	Malta	2	2,085,602	1,971,258	-114,344	-5.48 %
19	Netherlands	424	86,452,491	80,351,292	-6,101,199	-7.06 %
20	Poland	924	237,557,630	203,149,576	-34,405,754	-14.48 %
21	Portugal	267	36,908,808	36,425,933	-482,875	-1.31 %
22	Romania	253	0			

Country List

	country	installation count	allocated allowances 2005	verified emissions 2005	emissions-to-cap (=E-C) 2005	emissions-to-cap ratio (as % of cap) 2005
23	Slovak Republic	192	30,470,677	25,231,769	-5,238,908	-17.19 %
24	Slovenia	99	9,138,064	8,720,550	-417,514	-4.57 %
25	Spain	1086	172,160,788	183,627,216	11,467,759	+6.66 %
26	Sweden	785	22,289,169	19,381,682	-2,905,112	-13.04 %
27	United Kingdom	1110	206,071,973	242,513,426	36,441,453	+17.68 %
		12273	2,096,395,516	2,013,952,932	-82,255,897	-3.92 %

source: www.carbonmarketdata.com

Country List

	country	installation count	allocated allowances 2006	verified emissions 2006	emissions-to-cap (=E-C) 2006	emissions-to-cap ratio (as % of cap) 2006	verified emissions evolution (2006/2005)
1	Austria	220	32,649,366	32,382,819	-263,847	-0.81 %	-2.97 %
2	Belgium	351	59,952,177	54,775,326	-5,176,851	-8.63 %	-1.05 %
3	Bulgaria	128					
4	Cyprus	13	5,612,379	5,259,273	-353,106	-6.29 %	+3.55 %
5	Czech Republic	417	96,919,971	83,624,960	-13,295,011	-13.72 %	+1.32 %
6	Denmark	400	27,907,569	34,199,588	6,292,019	+22.55 %	+29.17 %
7	Estonia	52	18,148,233	12,023,949	-6,119,083	-33.73 %	-4.74 %
8	Finland	641	44,617,969	44,621,453	3,732	+0.01 %	+34.80 %
9	France	1108	149,966,891	126,979,057	-22,987,834	-15.33 %	-3.26 %
10	Germany	1944	495,488,263	477,980,570	-17,419,629	-3.52 %	+0.66 %
11	Greece	156	71,162,432	69,965,151	-1,153,169	-1.62 %	-1.95 %
12	Hungary	259	30,236,166	25,845,908	-4,330,904	-14.35 %	-1.24 %
13	Ireland	121	19,237,593	21,705,331	2,758,500	+14.56 %	-2.80 %
14	Italy	1083	205,050,245	227,439,469	22,998,148	+11.25 %	+0.10 %
15	Latvia	110	4,058,197	2,940,685	-1,117,512	-27.54 %	+2.56 %
16	Lithuania	113	10,576,697	6,516,911	-4,059,786	-38.38 %	-1.32 %
17	Luxembourg	15	3,229,321	2,712,972	-516,349	-15.99 %	+4.21 %

Country List

	country	installation count	allocated allowances 2006	verified emissions 2006	emissions-to-cap (=E-C) 2006	emissions-to-cap ratio (as % of cap) 2006	verified emissions evolution (2006/2005)
18	Malta	2	2,167,301	1,985,765	-181,536	-8.38 %	+0.74 %
19	Netherlands	424	86,387,889	76,702,137	-9,685,752	-11.21 %	-4.58 %
20	Poland	924	237,557,630	209,616,290	-27,939,040	-11.76 %	+3.13 %
21	Portugal	267	36,908,808	33,083,879	-3,824,929	-10.36 %	-9.34 %
22	Romania	253	0				
23	Slovak Republic	192	30,486,877	25,543,243	-4,939,714	-16.20 %	+1.25 %
24	Slovenia	99	8,691,991	8,842,182	150,191	+1.73 %	+1.23 %
25	Spain	1086	166,209,335	179,724,889	13,548,972	+8.15 %	-4.11 %
26	Sweden	785	22,483,602	19,888,921	-2,476,330	-11.07 %	+3.12 %
27	United Kingdom	1110	206,005,294	251,160,161	45,683,549	+22.23 %	+3.61 %
		12273	2,071,712,196	2,035,520,889	-34,405,271	-1.66 %	+0.83 %

source: www.carbonmarketdata.com

Country List

	country	installation count	allocated allowances 2007	verified emissions 2007	emissions-to-cap (=E-C) 2007	emissions-to-cap ratio (as % of cap) 2007	verified emissions evolution (2007/2006)
1	Austria	220	32,703,609	31,751,177	-895,489	-2.74 %	-1.97 %
2	Belgium	351	60,428,821	52,795,333	-6,715,492	-11.28 %	-3.61 %
3	Bulgaria	128	0	39,181,984	39,181,984		
4	Cyprus	13	5,899,493	5,396,164	-503,329	-8.53 %	+2.60 %
5	Czech Republic	417	96,919,971	87,834,764	-9,008,418	-9.30 %	+4.92 %
6	Denmark	400	27,902,895	29,407,370	2,666,227	+9.97 %	-9.92 %
7	Estonia	52	21,240,323	15,259,752	-5,958,515	-28.08 %	+26.89 %
8	Finland	641	44,620,371	42,541,353	-2,078,807	-4.66 %	-4.85 %
9	France	1108	149,775,970	126,634,815	-23,141,155	-15.45 %	-0.27 %
10	Germany	1944	497,302,479	487,004,078	-10,208,700	-2.05 %	+1.85 %
11	Greece	156	71,162,432	72,717,011	1,602,421	+2.25 %	+3.93 %
12	Hungary	259	30,236,166	26,836,758	-3,289,445	-10.92 %	+3.23 %
13	Ireland	121	19,240,229	21,246,120	2,296,653	+12.12 %	-2.12 %
14	Italy	1083	203,255,077	226,388,058	23,237,650	+11.44 %	-1.57 %
15	Latvia	110	4,035,018	2,849,210	-1,181,935	-29.32 %	-4.85 %
16	Lithuania	113	10,318,307	5,998,744	-4,319,563	-41.86 %	-7.95 %
17	Luxembourg	15	3,229,321	2,567,231	-662,090	-20.50 %	-5.37 %
18	Malta	2	2,285,572	2,027,364	-258,208	-11.30 %	+2.09 %
19	Netherlands	424	86,476,714	79,874,659	-6,602,055	-7.63 %	+4.09 %
20	Poland	924	237,542,720	209,618,357	-27,029,763	-11.42 %	+0.29 %

Country List

	country	installation count	allocated allowances 2007	verified emissions 2007	emissions-to-cap (=E-C) 2007	emissions-to-cap ratio (as % of cap) 2007	verified emissions evolution (2007/2006)
21	Portugal	267	36,908,808	31,229,226	-5,636,320	-15.29 %	-5.62 %
22	Romania	253	74,343,205	69,616,155	-4,334,658	-5.86 %	
23	Slovak Republic	192	30,486,829	24,516,834	-5,953,341	-19.54 %	-4.12 %
24	Slovenia	99	8,245,914	9,048,634	814,210	+9.89 %	+2.33 %
25	Spain	1086	159,739,872	186,573,449	26,914,658	+16.86 %	+3.75 %
26	Sweden	785	22,846,480	19,040,566	-3,749,961	-16.45 %	-4.76 %
27	United Kingdom	1110	215,875,184	256,581,340	41,597,110	+19.35 %	+2.15 %
		12273	2,153,021,780	2,164,536,506	16,783,669	+0.78 %	+0.92 %

source: www.carbonmarketdata.com

	country	installation count	allocated allowances 2008	verified emissions 2008	emissions-to-cap (=E-C) 2008	emissions-to-cap ratio (as % of cap) 2008	verified emissions evolution (2008/2007)	allowances evolution (2008/2007)	emissions 2008 - % published
1	Austria	221	30,151,582	32,003,648	1,852,066	+6.14 %	-5.37 %	-13.81 %	+99.53 %
2	Belgium	351	55,384,483	55,458,443	73,960	+0.13 %	+3.75 %	-8.17 %	+100.00 %
3	Bulgaria	137	0	38,026,429	38,026,429		-2.95 %		
4	Cyprus	13							
5	Czech Republic	417	85,559,188	80,399,038	-5,160,150	-6.03 %	-8.49 %	-9.02 %	+99.94 %
6	Denmark	400	23,983,428	26,544,707	2,561,279	+10.68 %	-9.70 %	-10.05 %	+99.92 %
7	Estonia	54	11,678,257	13,540,891	1,862,634	+15.95 %	-13.26 %	-46.34 %	+99.85 %
8	Finland	643	36,530,616	36,047,602	-483,014	-1.32 %	-16.41 %	-19.20 %	+99.76 %
9	France	1109	129,568,044	123,066,110	-6,501,934	-5.02 %	-2.71 %	-8.97 %	+98.72 %
10	Germany	1953	388,770,697	472,586,840	83,816,143	+21.56 %	-3.17 %	-24.03 %	+99.78 %
11	Greece	156	63,685,092	69,853,893	6,168,801	+9.69 %	-3.54 %	-10.21 %	+99.89 %
12	Hungary	261	25,044,006	27,243,837	2,199,831	+8.78 %	+0.43 %	-17.35 %	+99.77 %
13	Ireland	121	19,971,011	20,381,698	410,687	+2.06 %	-2.96 %	+11.50 %	+99.97 %
14	Italy	1083	211,752,175	220,661,760	8,909,585	+4.21 %	-2.90 %	+5.25 %	+99.95 %
15	Latvia	111	2,938,649	2,743,538	-195,111	-6.64 %	-5.06 %	-25.87 %	+99.61 %
16	Lithuania	113	7,509,636	6,103,720	-1,405,916	-18.72 %	-0.32 %	-23.38 %	+98.92 %
17	Luxembourg	15	2,488,229	2,098,895	-389,334	-15.65 %	-16.31 %	-20.60 %	+100.00 %
18	Malta	2							
19	Netherlands	425	76,756,732	83,489,847	6,752,801	+8.80 %	-3.30 %	-16.98 %	+99.87 %
20	Poland	924	200,957,640	204,107,419	3,149,779	+1.57 %	-7.02 %	-19.52 %	+99.87 %
21	Portugal	267	30,496,609	29,913,831	-582,778	-1.91 %	-4.32 %	-18.07 %	+99.61 %

	country	installation count	allocated allowances 2008	verified emissions 2008	emissions-to-cap (=E-C) 2008	emissions-to-cap ratio (as % of cap) 2008	verified emissions evolution (2008/2007)	allowances evolution (2008/2007)	emissions 2008 - % published
22	Romania	258	70,652,726	63,647,190	-7,005,536	-9.92 %	-8.67 %	-4.60 %	+99.23 %
23	Slovak Republic	192	32,166,094	25,336,706	-6,829,388	-21.23 %	+1.13 %	+3.74 %	+99.83 %
24	Slovenia	99	8,214,360	8,860,105	645,745	+7.86 %	-1.74 %	+0.89 %	+100.00 %
25	Spain	1093	154,047,569	163,370,861	9,324,963	+6.05 %	-13.14 %	+1.26 %	+99.52 %
26	Sweden	786	20,774,672	19,958,254	-816,418	-3.93 %	+4.24 %	-9.05 %	+99.50 %
27	United Kingdom	1110	214,039,037	264,920,434	50,881,397	+23.77 %	+3.44 %	-6.32 %	+99.72 %
		12314	1,903,120,532	2,090,365,696	187,266,521	+9.84 %	-4.10 %	-12.23 %	

source: www.carbonmarketdata.com